



2014 Regional Travel Study

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Presented to
Washington State Transportation Commission
May 19th, 2015

2014 Regional Travel Study

- ❖ **Background & methodology**
- ❖ **Data & findings**
- ❖ **Coming up next**

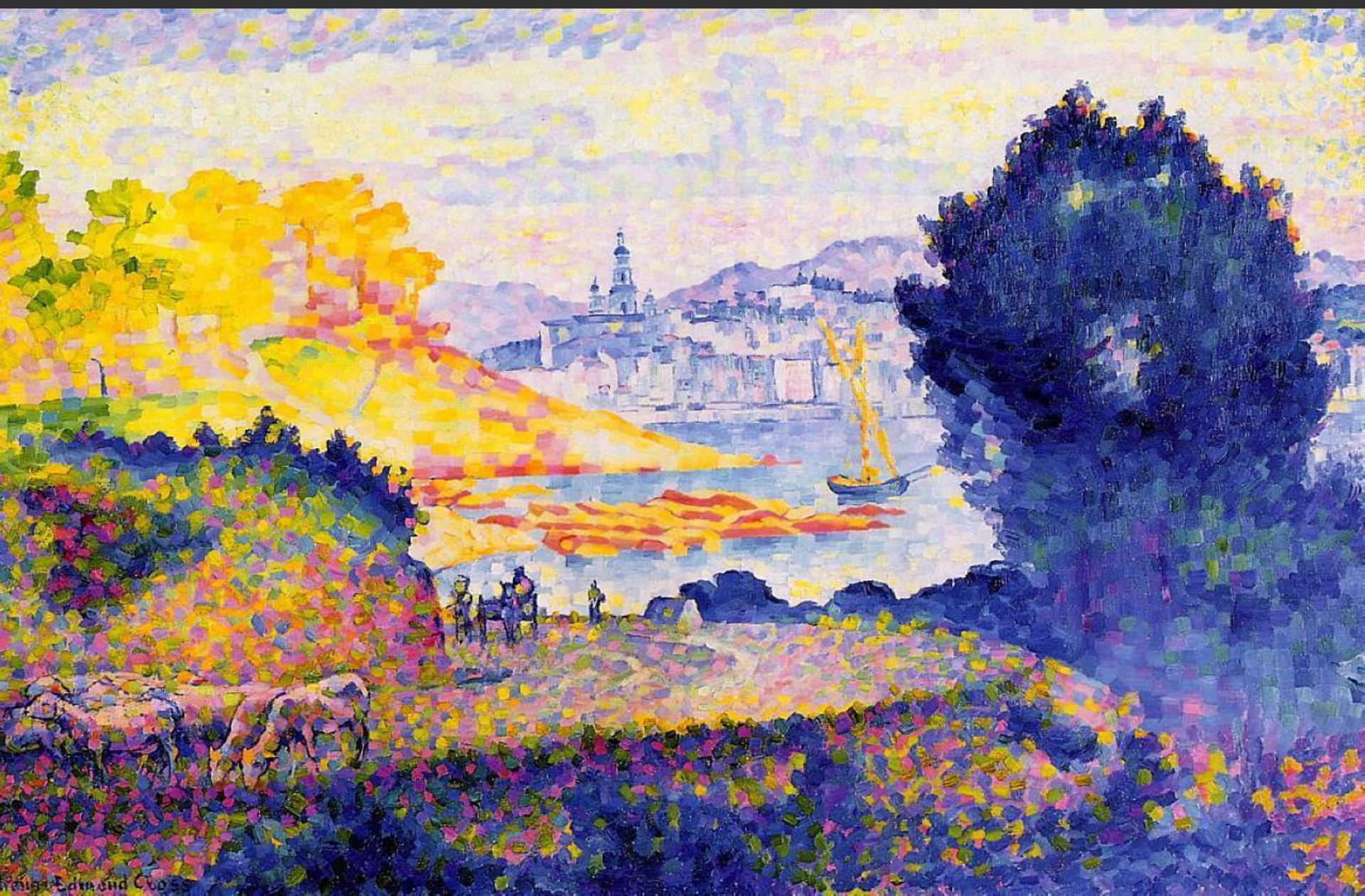
2014 Regional Travel Study

❖ **Background & methodology**

❖ Data & findings

❖ Coming up next

The sum of our choices creates a picture of travel



Travel surveys at PSRC

1961

1971

1988

1999

2006

2014

Travel Study

Help us improve transportation in the Puget Sound region!

Puget Sound Regional Council

STUDY OVERVIEW

This study has 2 parts

1

**HOUSEHOLD
INFO SURVEY**

2

**TRAVEL DIARY
SURVEY**

When do I take the survey?	As soon as convenient	After the day of your assigned travel
Who takes the survey?	You	All adults (an adult should also report trips for children under 18)
How long will the survey take?	About 5 minutes	About 10 minutes per person
What is the survey about?	We ask you about your household and the vehicles you use.	Return to the website (or call) to tell us about the details for all the trips you made on your assigned travel date. (Use your Travel Log to keep track!)



After completing both parts, your household will receive your choice of an Amazon.com or Starbucks gift card.



PUGET SOUND REGIONAL
Travel Study

- ABOUT
- REGION
- NEWS
- PARTICIPATE
- FAQS
- SPONSORS
- CONTACT
- PRIVACY

Help Video

Locate by address Locate on the map

To locate by address, please enter a *street number* or the *nearest intersection* - or you can enter a business name.

🔍

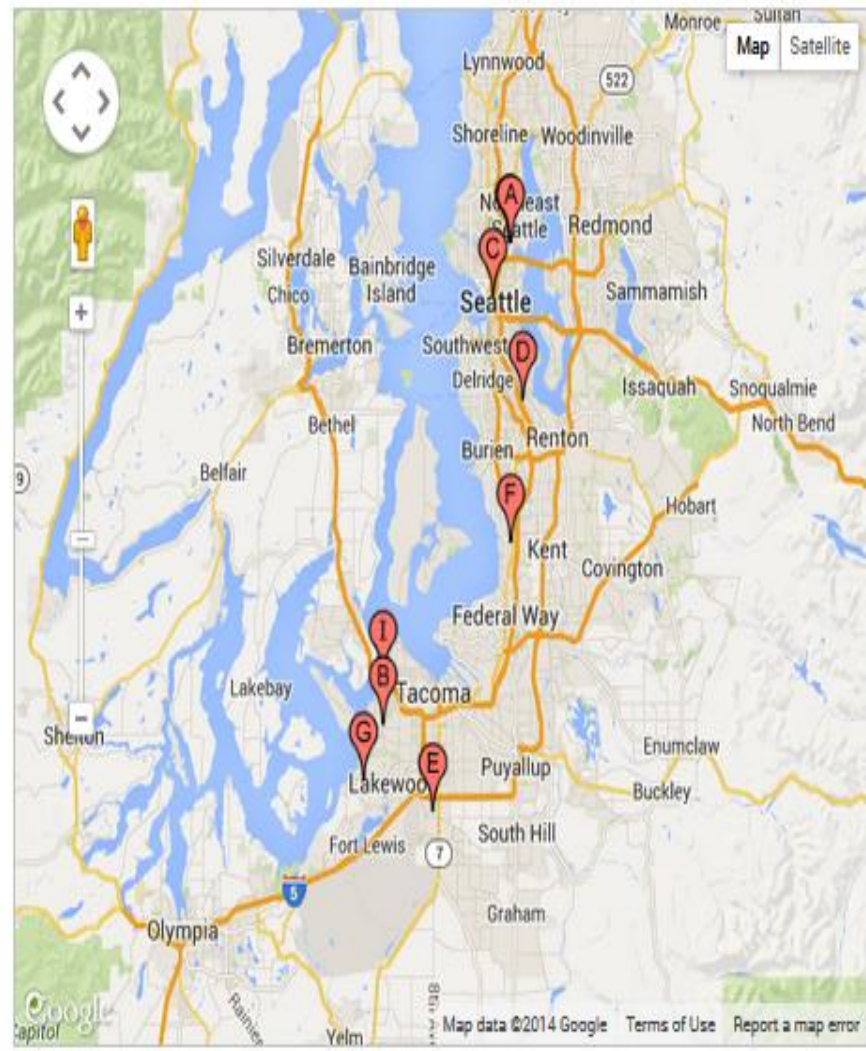
- Example: 100 Main Street, Seattle, WA
- Example: Broadway & 19th St, Everett, WA
- Example: Hungry Goose Bistro, Puyallup, WA

Please choose the correct location from the list, then click "Confirm" below to continue.

If your location doesn't appear, please try searching again.

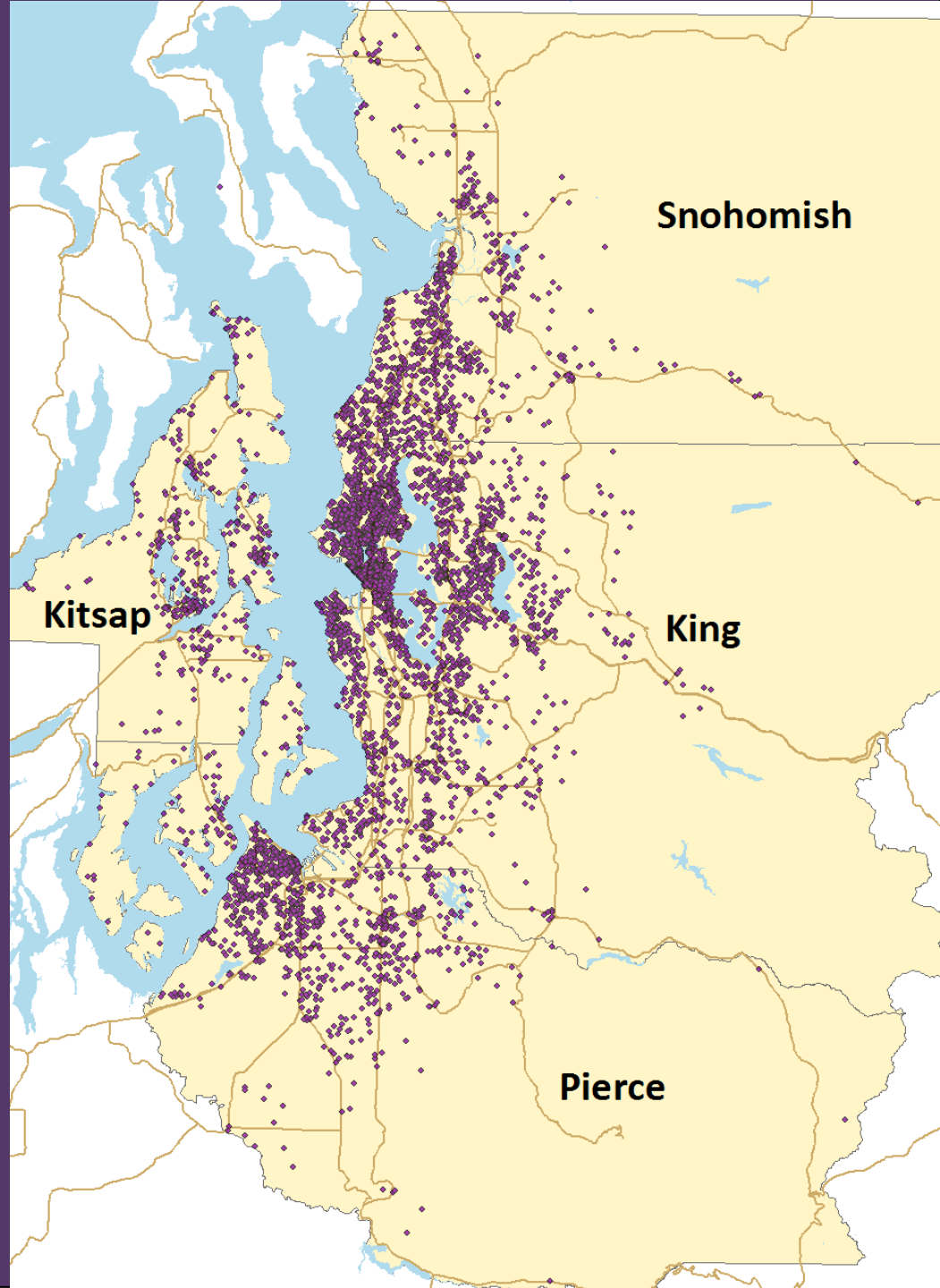
9 result(s) found.

- ☒ **University of Washington** Seattle, WA, United States **A**
- ☐ **Macdaddy Auto Glass Universit** 3800 Bridgeport Way W, University Place, WA, United States **B**



Surveyed Households

- **6,094** households
(goal was 5,200)
- 1,137 households in regional centers (19%)
- Exceeded every target metric in every county
- Deliberately oversampled households with no vehicles
- Deliberately oversampled 1 and 2 person households
- 50,856 total trips recorded



Cleaning Process

Bad or duplicate records removed

hhid	pernum	tripnum	place_start	place_end	dcnty	dcity	dzip	time_start	time_end	trip_duration	gdist	a_duration	d_purpose
14104011	1	1	HOME	I STARTED MY DAY AT HOME	1	SEATTLE	98122	11:15	11:50	35	0	0	6
14104011	1	2	I STARTED	NORTH SEATTLE CC	1	SEATTLE	98103	11:50	12:25	35	7.09	205	6
14104011	1	3	NORTH SEA	HALF PRICE BOOKS	1	SEATTLE	98105	15:50	16:25	35	3.18	0	5
14104011	1	4	HALF PRICE	FRIENDS HOUSE	1	SEATTLE	98102	16:25	17:15	50	3.79	0	12

place_start	place_end	dcnty	dcity	dzip	time_start	time_end	trip_duration	gdist	a_duration	d_purpose
HOME	DICK'S DRIVE-IN	1	SEATTLE	98102	19:00	19:20	20	0.54	5	11
DICK'S DRIVE-IN	THEN I WENT HOME	1	SEATTLE	98109	19:25	19:40	15	0.86	0	1
THEN I WENT HOME	HOME	1	SEATTLE	98109	19:40	19:45	5	0	435	1

hhid	pernum	tripnum	place_start	place_end	dcnty	dcity	dzip	time_start	time_end	trip_duration	gdist	a_duration	d_purpose
14100123	2	5	LUNCH	WORKPLACE	1	SEATTLE	98109	13:55	14:10	15	0.25	130	2
14100123	2	6	WORKPLAC	STARBUCKS	1	SEATTLE	98109	16:20	16:25	5	0.26	15	11
14100123	2	7	STARBUCKS	WORKPLACE	1	SEATTLE	98109	16:40	16:45	5	0.13	15	2
14100123	2	8	WORKPLAC	PICKUP AT WORK	1	SEATTLE	98109	17:00	17:05	5	0	0	9
14100123	2	9	PICKUP AT	HOME	1	SEATTLE	98109	17:05	17:20	15	0.9	580	1

Cleaning Process

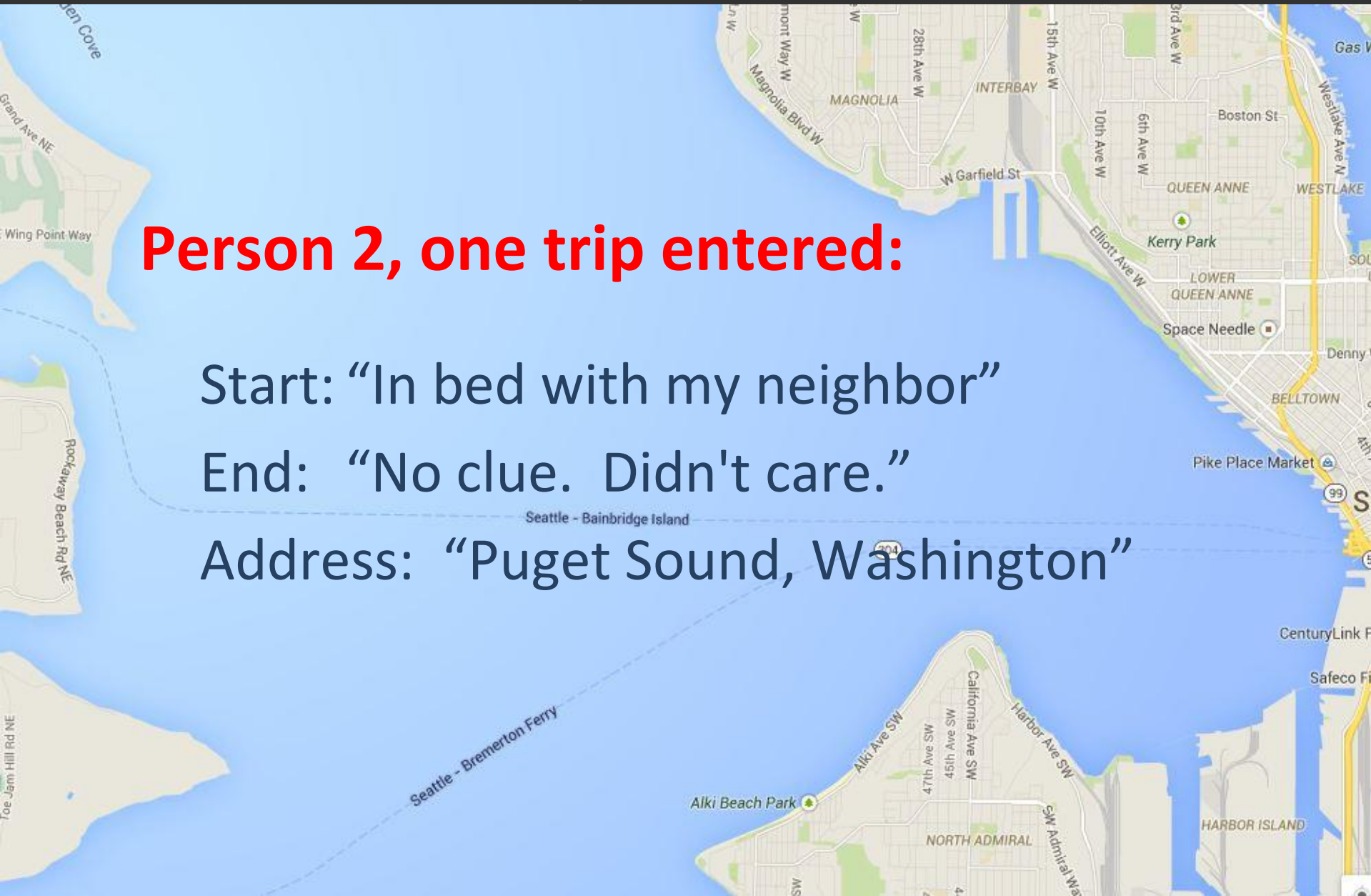
Missing trips added

hhid	pernum	tripnum	place_start	place_end	dcnty	dcity	dzip	time_start	time_end	trip_duration	gdist	a_duration	d_purpose
14100245	3	5	LOWE'S	RESIDENCE	2	PORT ORC	98366	13:00	13:30	30	2.23	195	3
14100245	3	6	RESIDENCE	DAYCARE	3	PUYALLUP	98373	16:45	17:15	30	37.96	5	9
14100245	3	7	DAYCARE	HOME	3	PUYALLUP	98374	17:20	17:30	10	3.98	570	1
14100245	4	1	HOME	DAYCARE	3	PUYALLUP	98373	7:00	7:10	10	3.98	1190	6

hhid	pernum	tripnum	member3	member4
14100245	3	5	1410024503	
14100245	3	6	1410024503	
14100245	3	7	1410024503	1410024504
14100245	4	1	1410024503	1410024504

hhid	pernum	tripnum	place_start	place_end	dcnty	dcity	dzip	time_start	time_end	trip_duration	gdist	a_duration	d_purpose
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14100245	4	2	DAYCARE	HOME	3	PUYALLUP	98374	17:20	17:30	10	3.98	570	1

Some diaries just can't be saved...

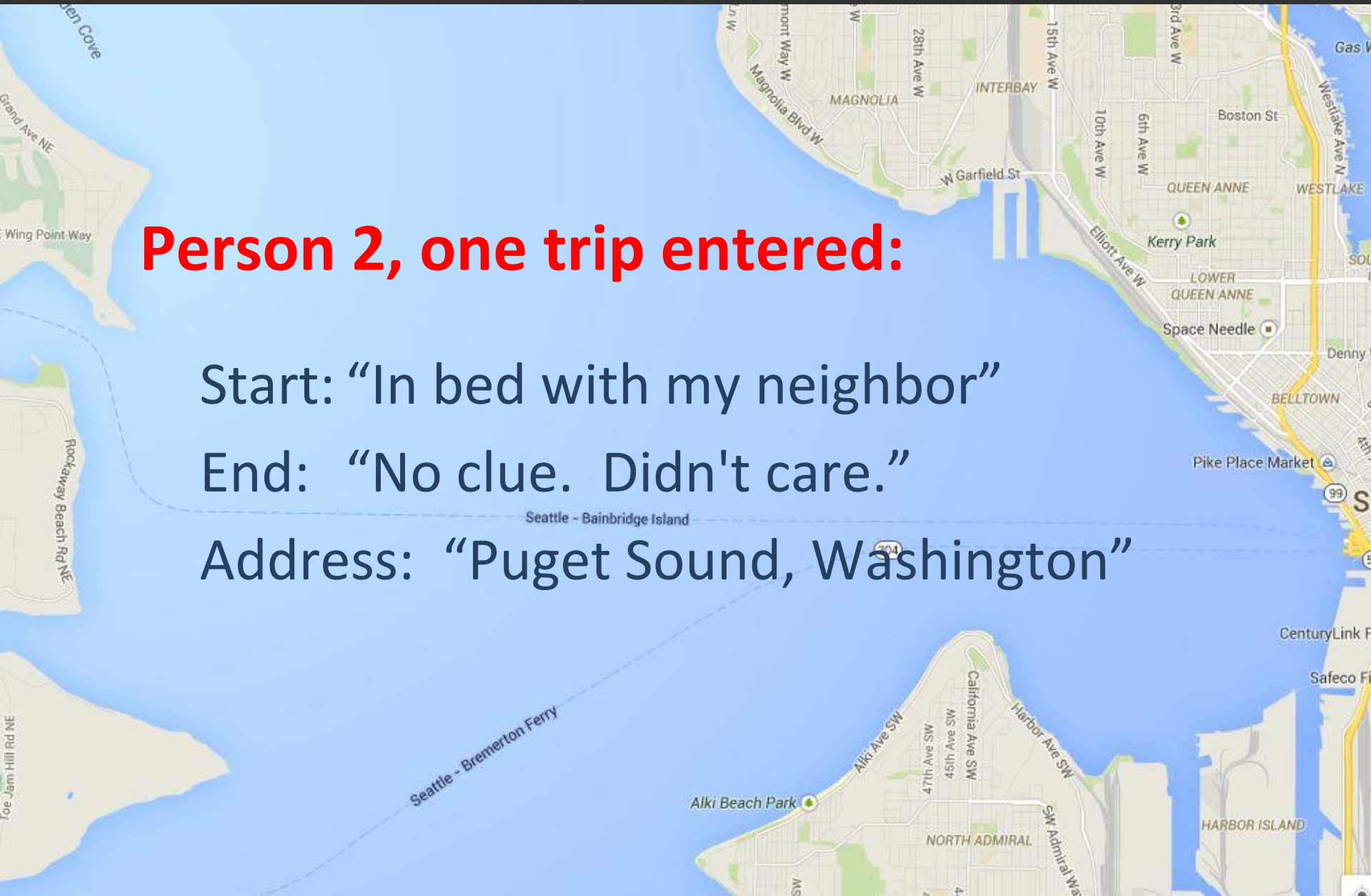


Person 2, one trip entered:

Start: "In bed with my neighbor"

End: "No clue. Didn't care."

Address: "Puget Sound, Washington"

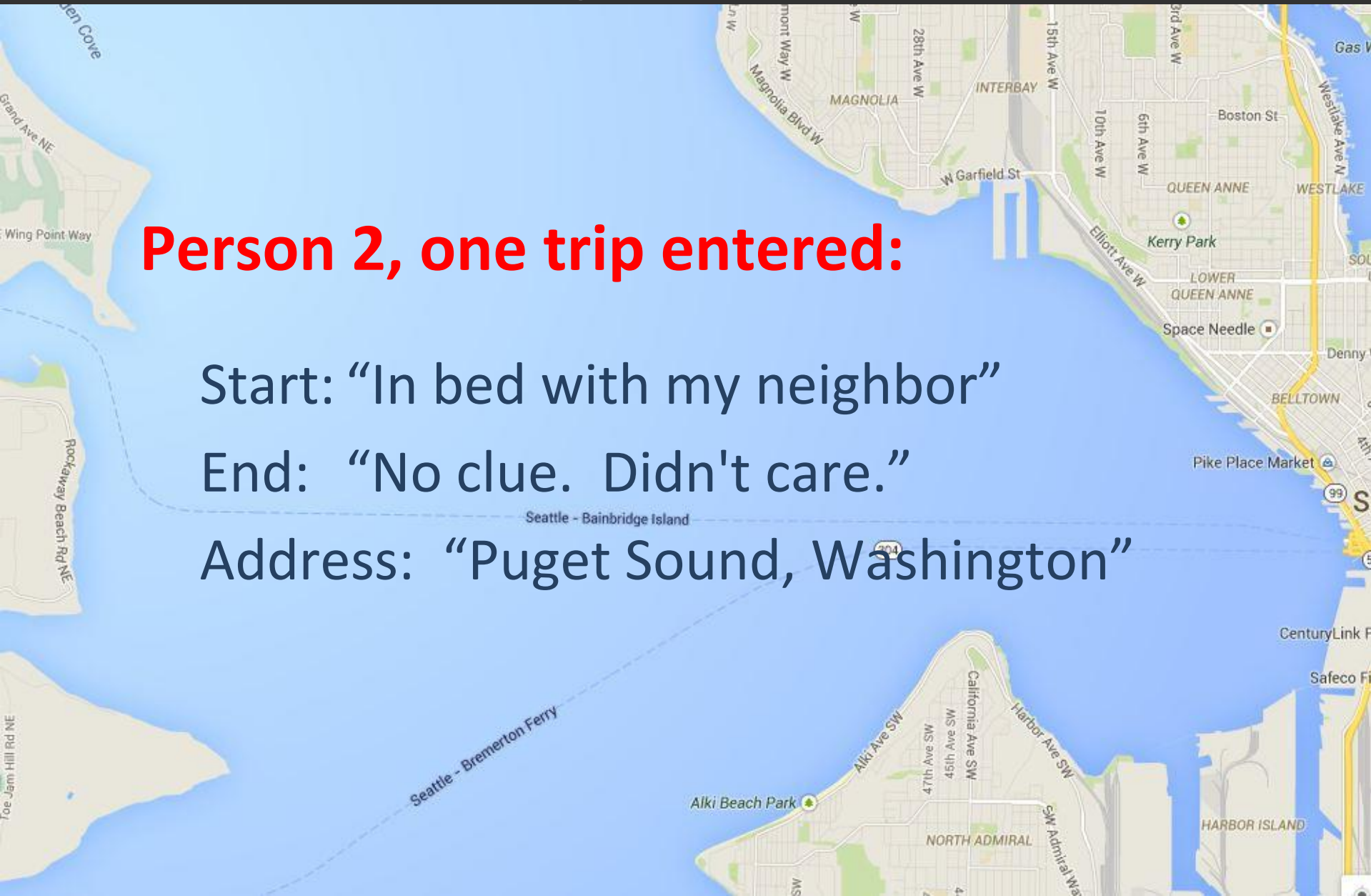


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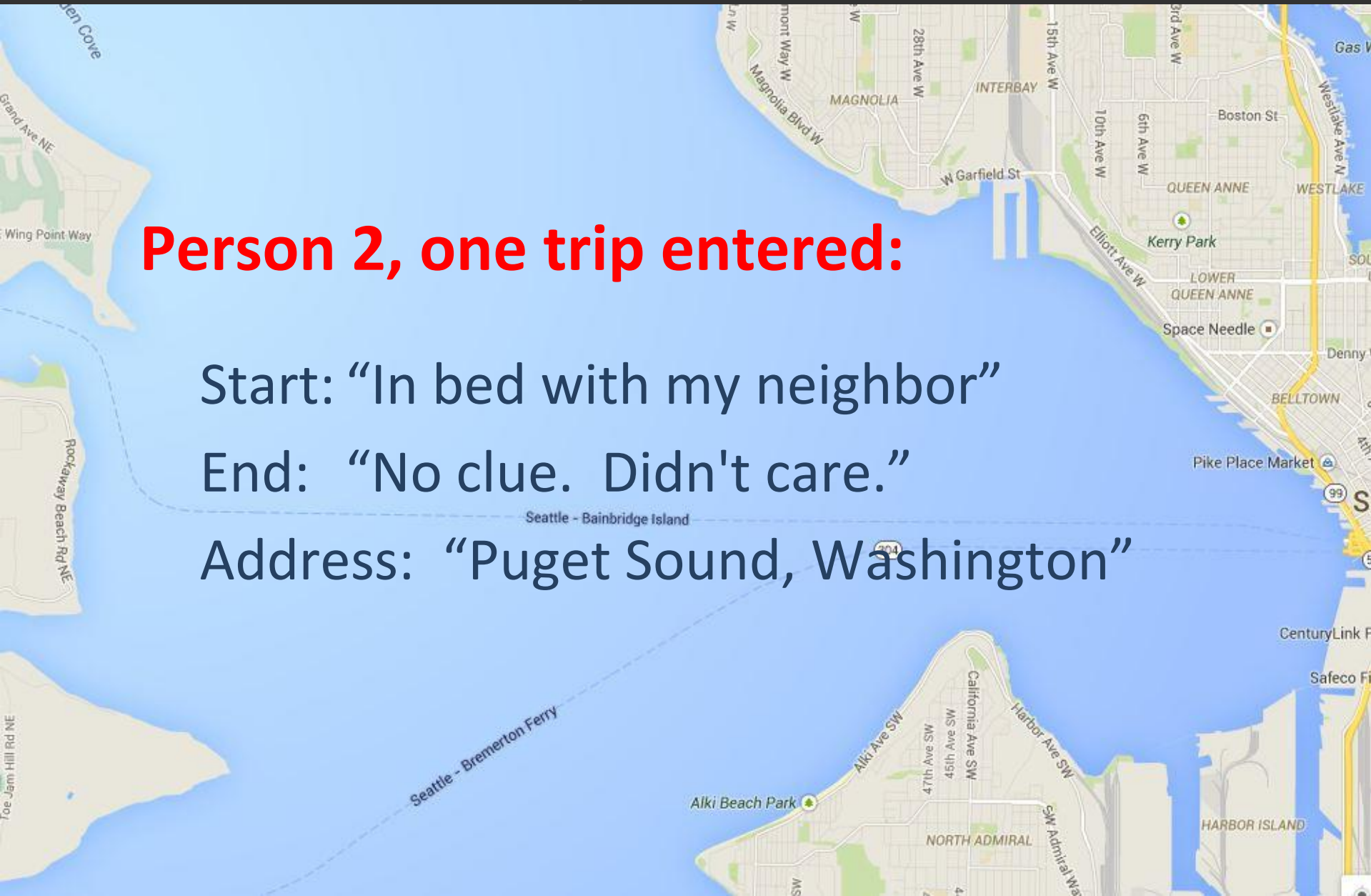


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2014 Regional Travel Study

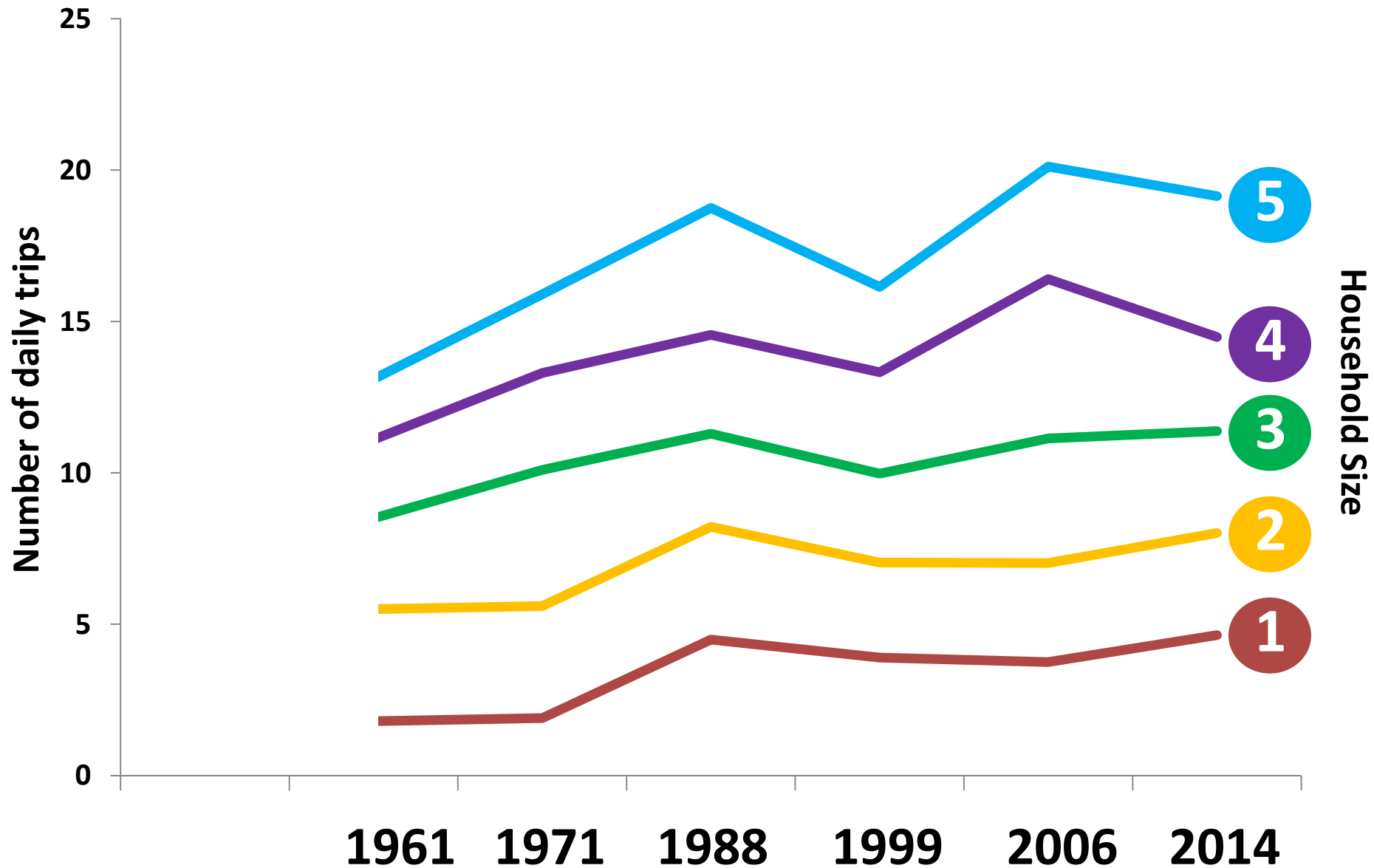
- ❖ Background & methodology
- ❖ **Data & Findings**
- ❖ Coming up next

The Big Picture

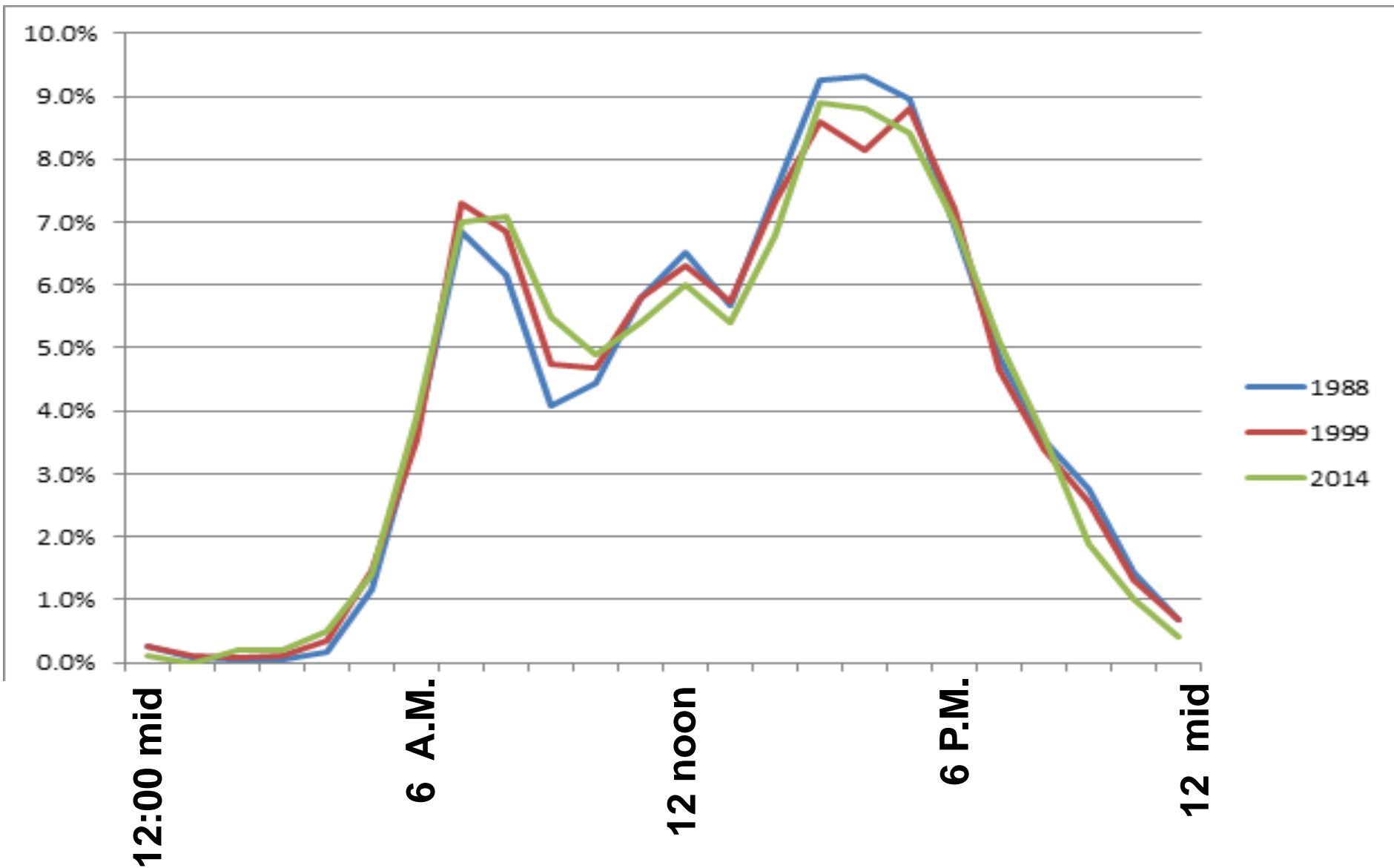
Our region is changing in some notable ways, but has remained very much the same in most others.

The rate of change is gradual, but is faster in regional growth centers and in core parts of Seattle.

Trips per household, by HH size



Trips by time of day



Mode Share

Transit and bike/walk mode share are all up
at the expense of driving...

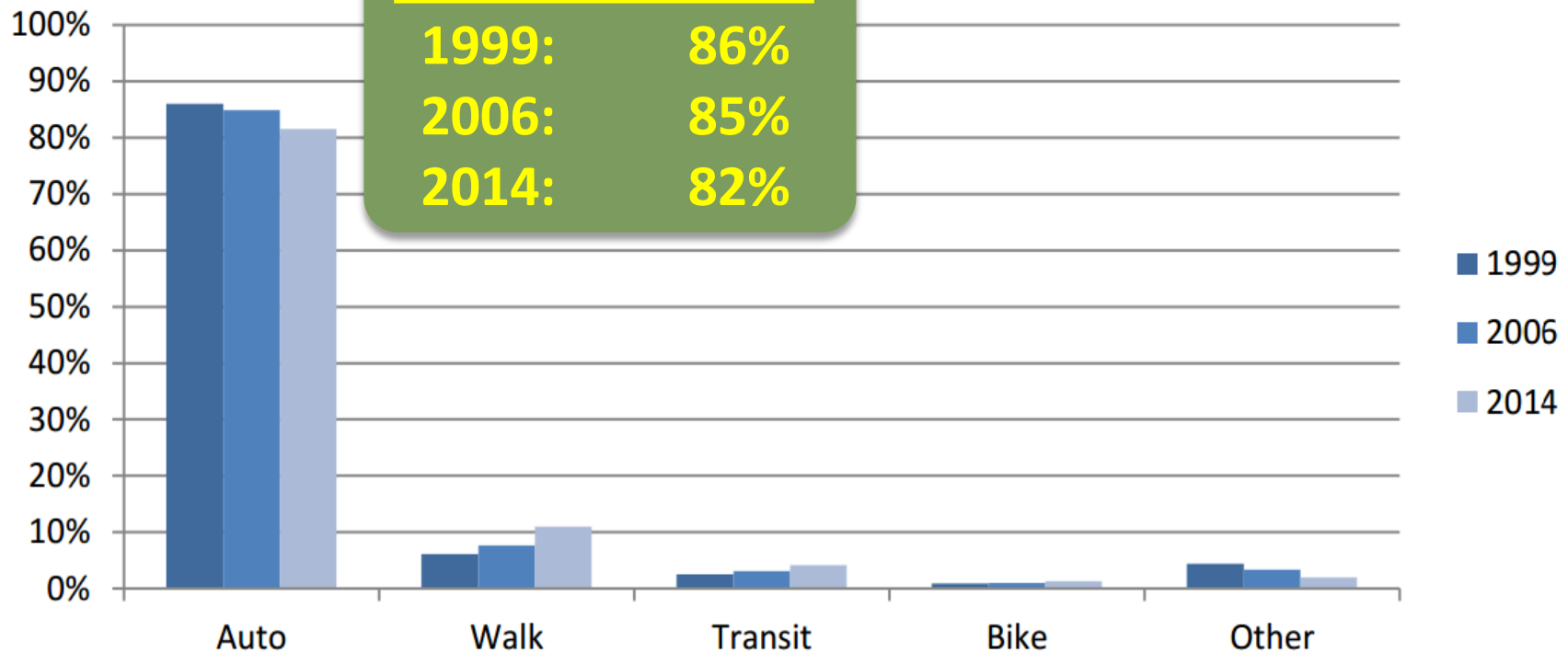
...but the rate of that change has been gradual:

Auto mode share

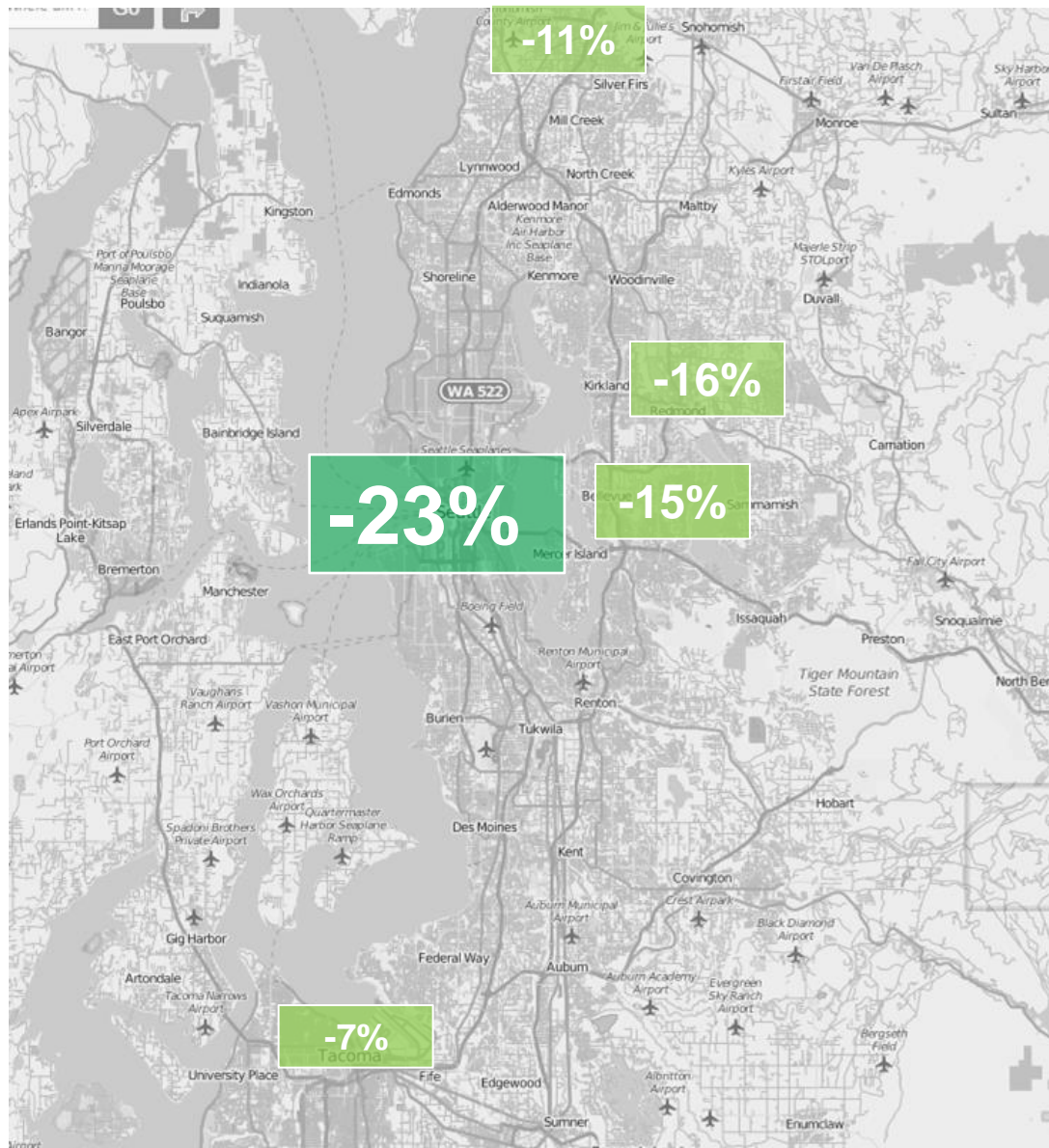
1999: 86%

2006: 85%

2014: 82%



Decrease in Driving Shares 2006 - 2014



Region:

-3%

County-to-County Work Patterns

1999

	<i>Home County</i>			
<i>Work County</i>	King	Kitsap	Pierce	Snohomish
King	93.3%	18.7%	23.4%	31.4%
Kitsap	0.0%	75.2%	1.3%	0.1%
Pierce	1.8%	2.1%	72.1%	0.4%
Snohomish	4.4%	2.5%	0.4%	67.3%
Other WA County	0.4%	1.6%	2.9%	0.9%

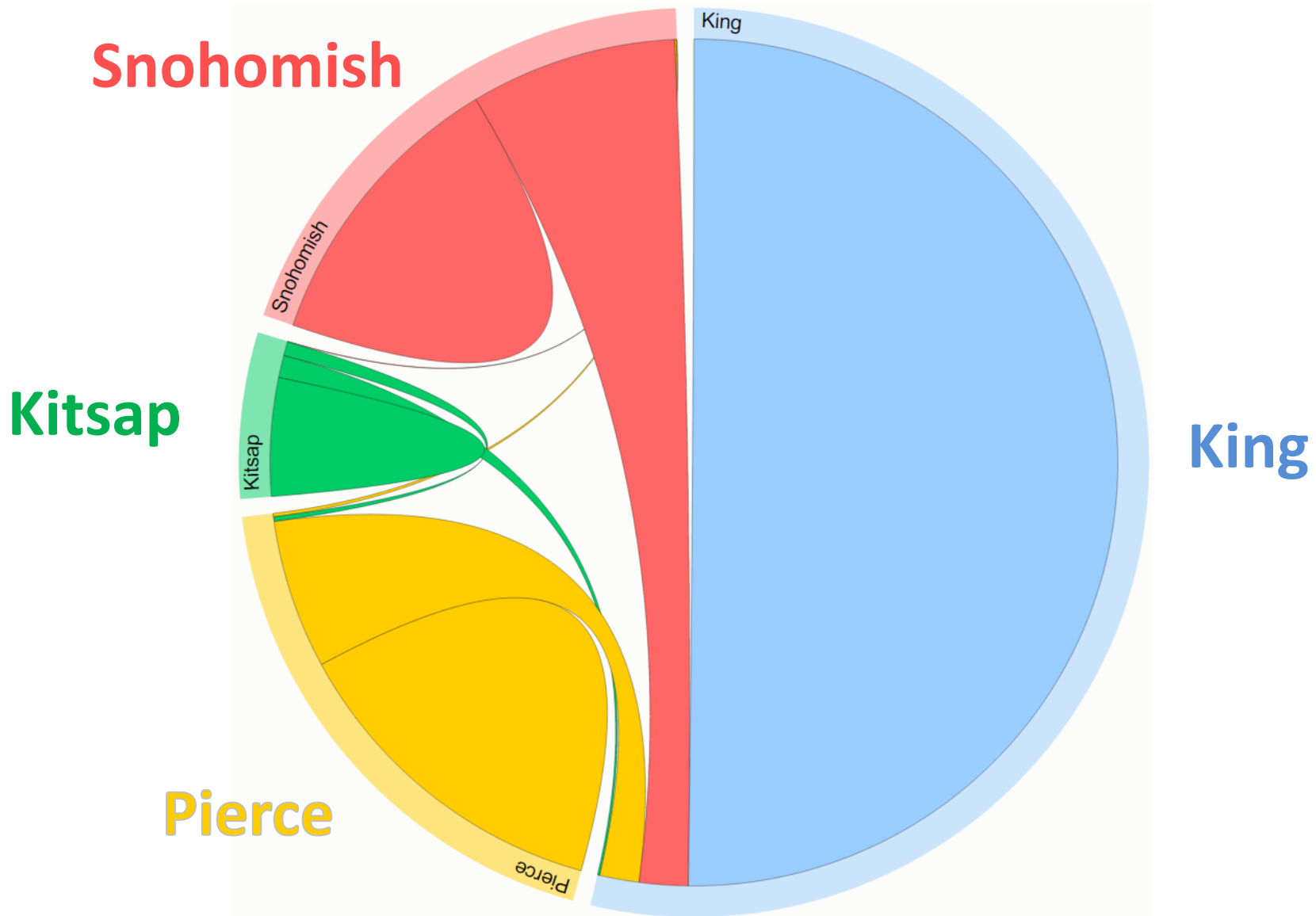
2006

	<i>Home County</i>			
<i>Work County</i>	King	Kitsap	Pierce	Snohomish
King	90.2%	30.1%	36.9%	41.1%
Kitsap	0.3%	56.7%	1.3%	0.6%
Pierce	2.1%	7.7%	54.5%	2.6%
Snohomish	4.5%	0.5%	2.8%	51.1%
Other WA County	2.9%	5.1%	4.5%	4.5%

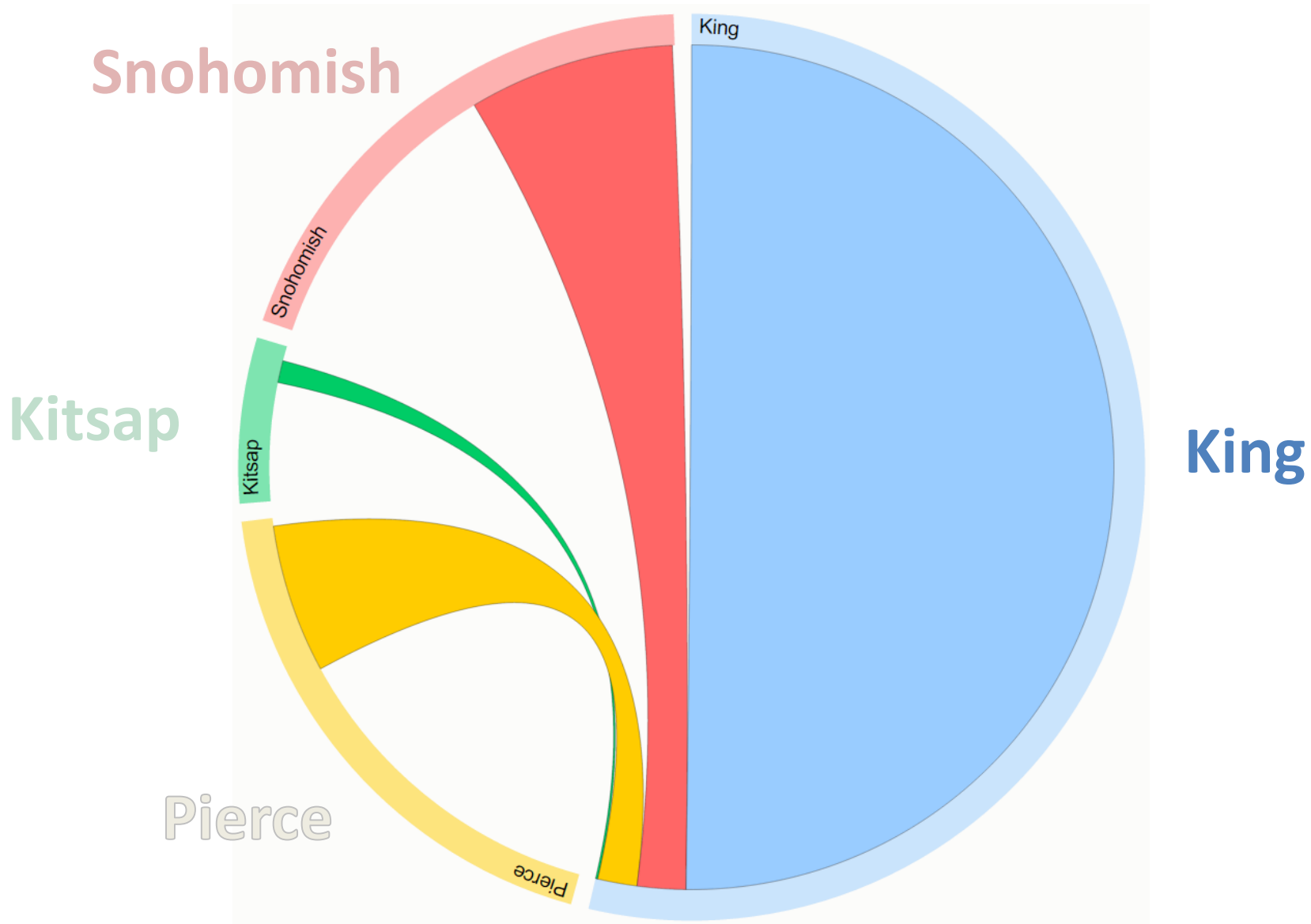
2014

	<i>Home County</i>			
<i>Work County</i>	King	Kitsap	Pierce	Snohomish
King	93.4%	14.0%	28.7%	40.6%
Kitsap	0.2%	74.6%	0.9%	0.1%
Pierce	2.8%	9.0%	64.6%	0.4%
Snohomish	3.5%	0.3%	0.7%	57.4%
Other WA County	0.2%	2.1%	5.2%	1.5%

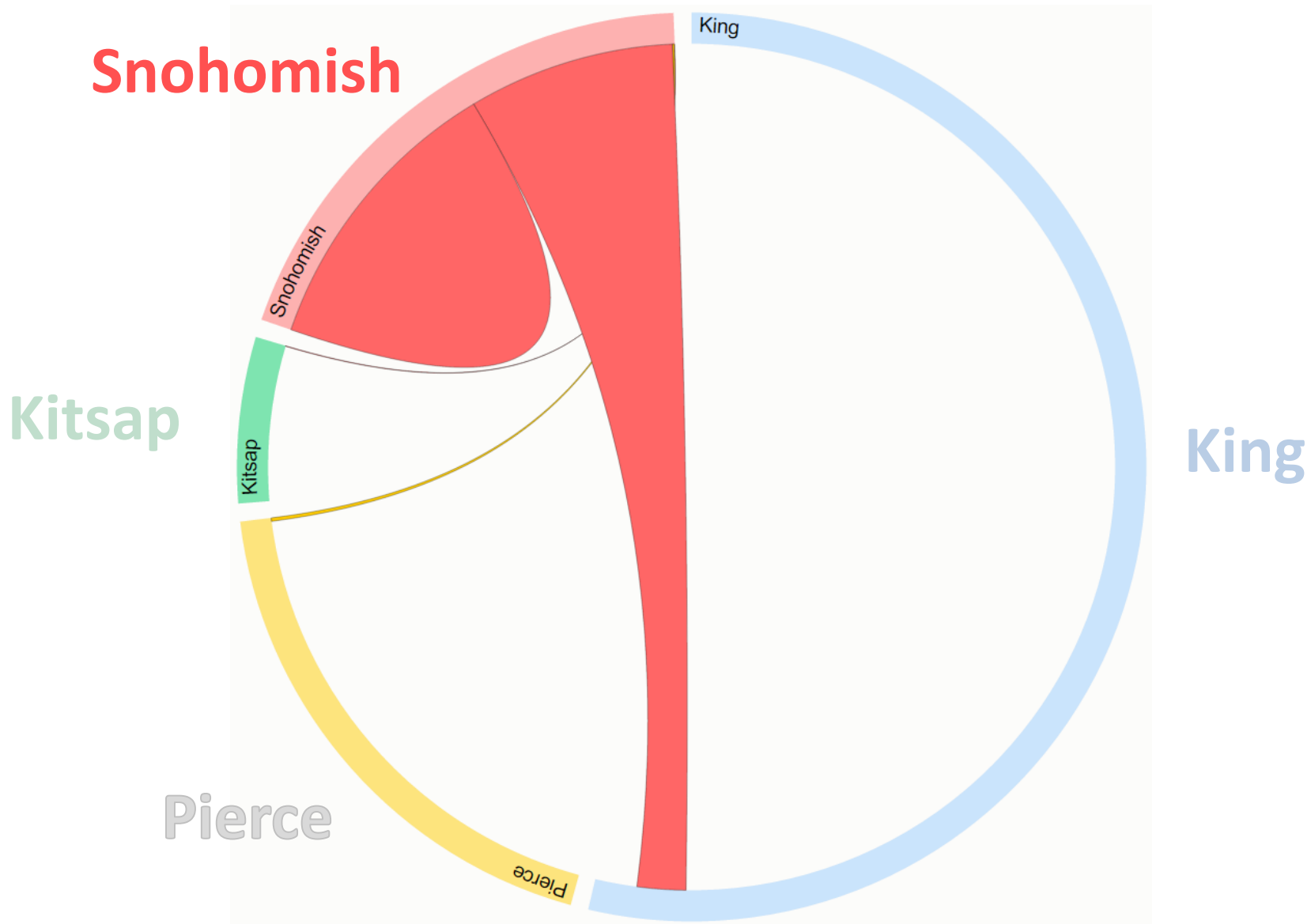
County-to-County Work Patterns



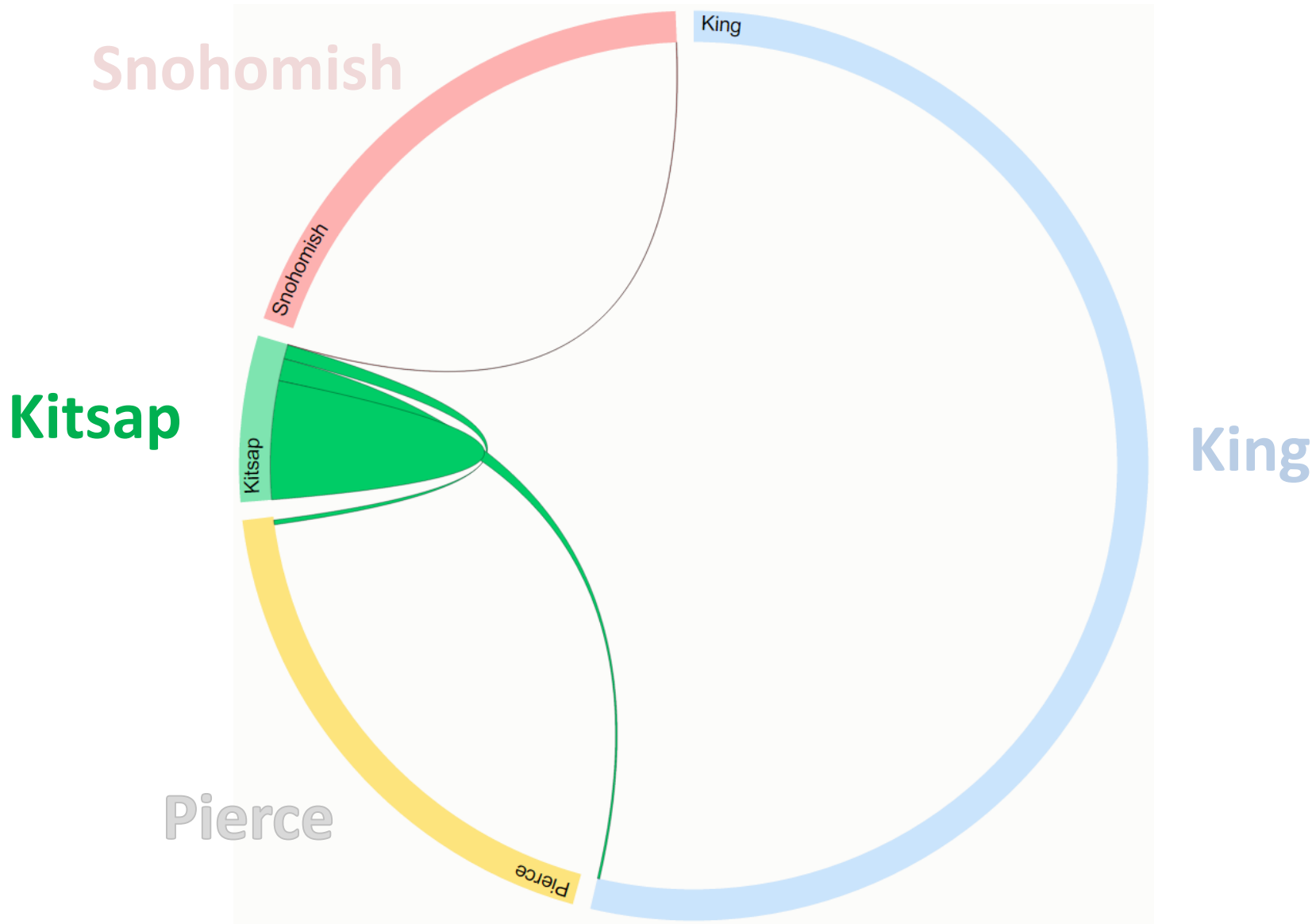
County-to-County Work Patterns



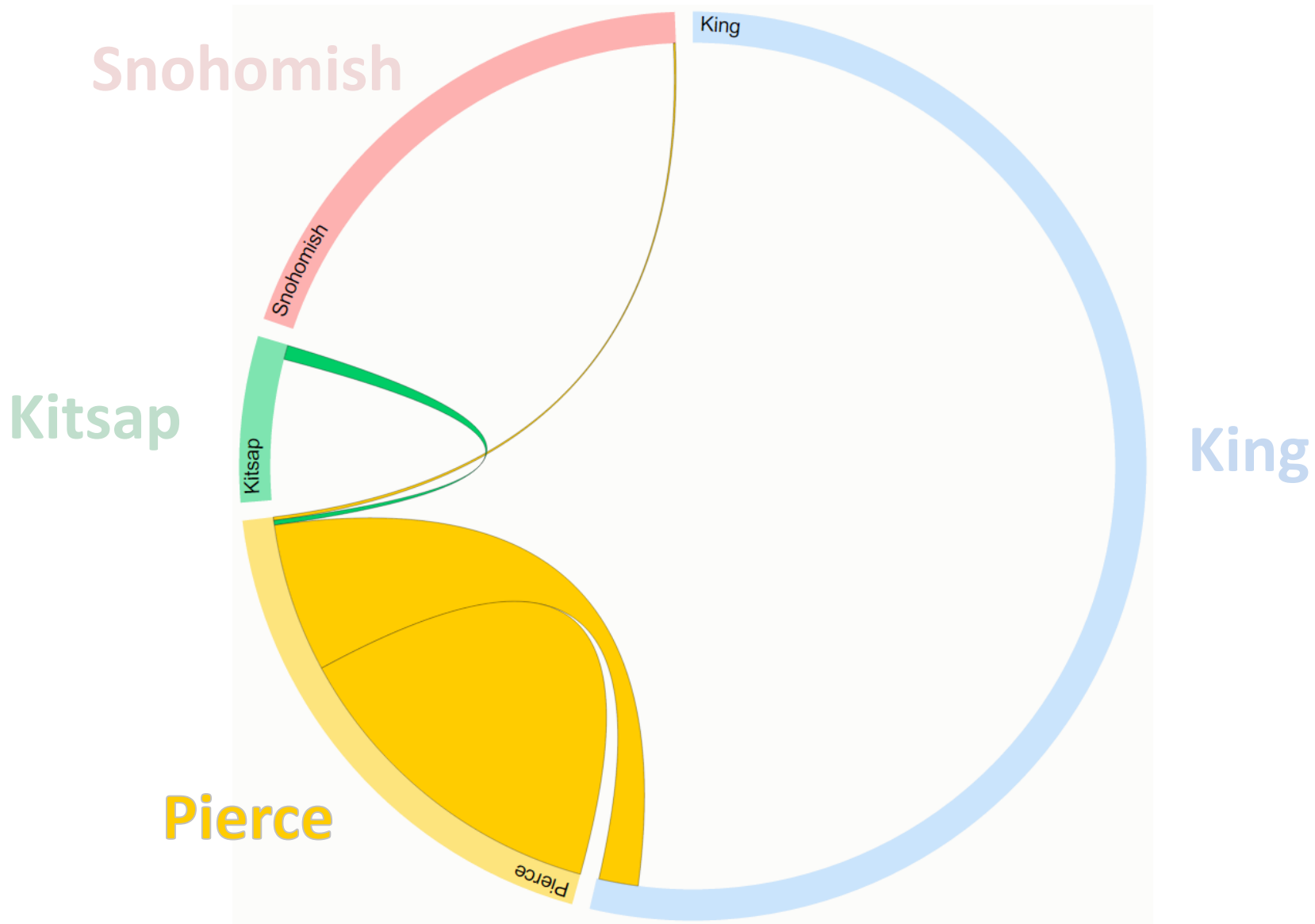
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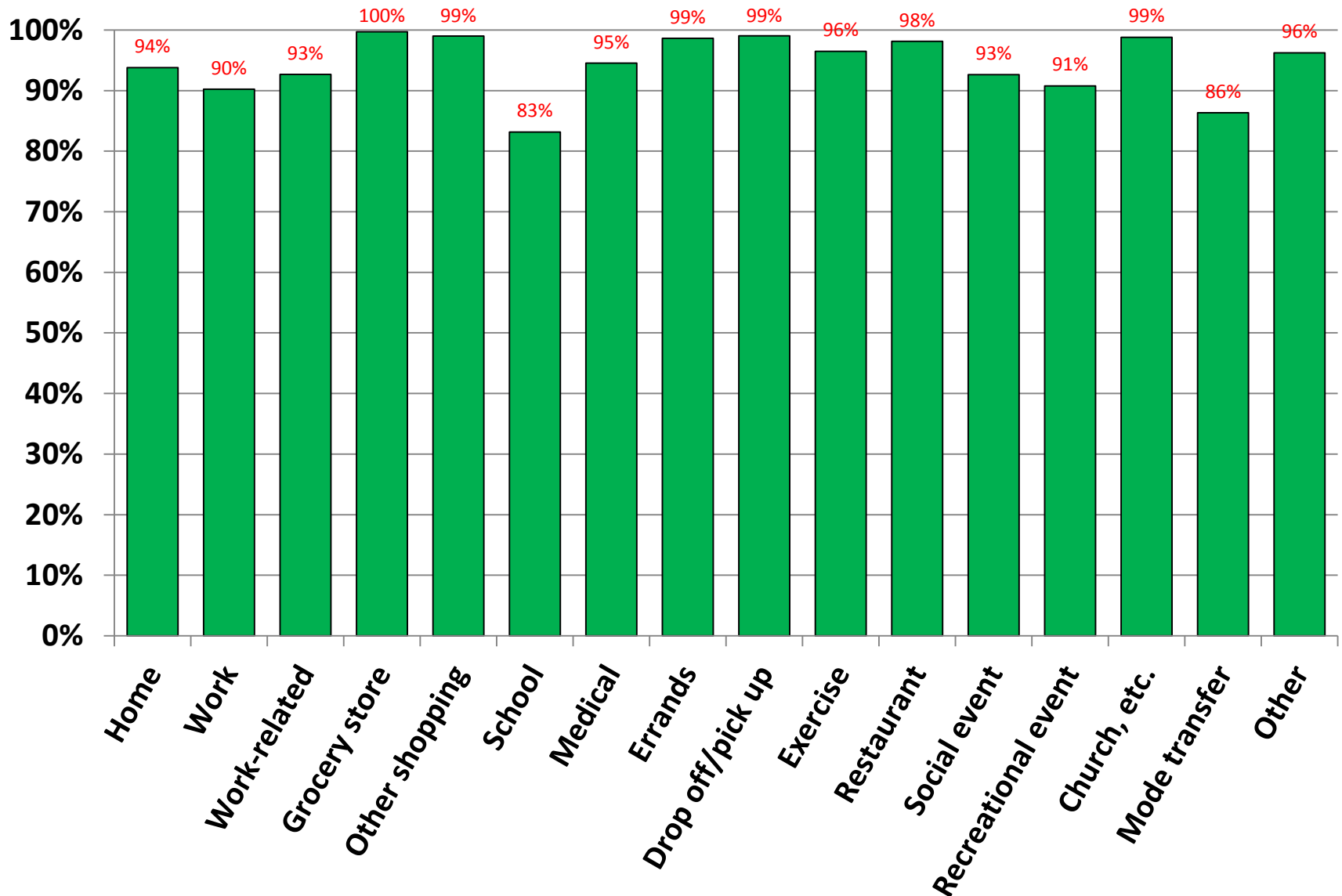
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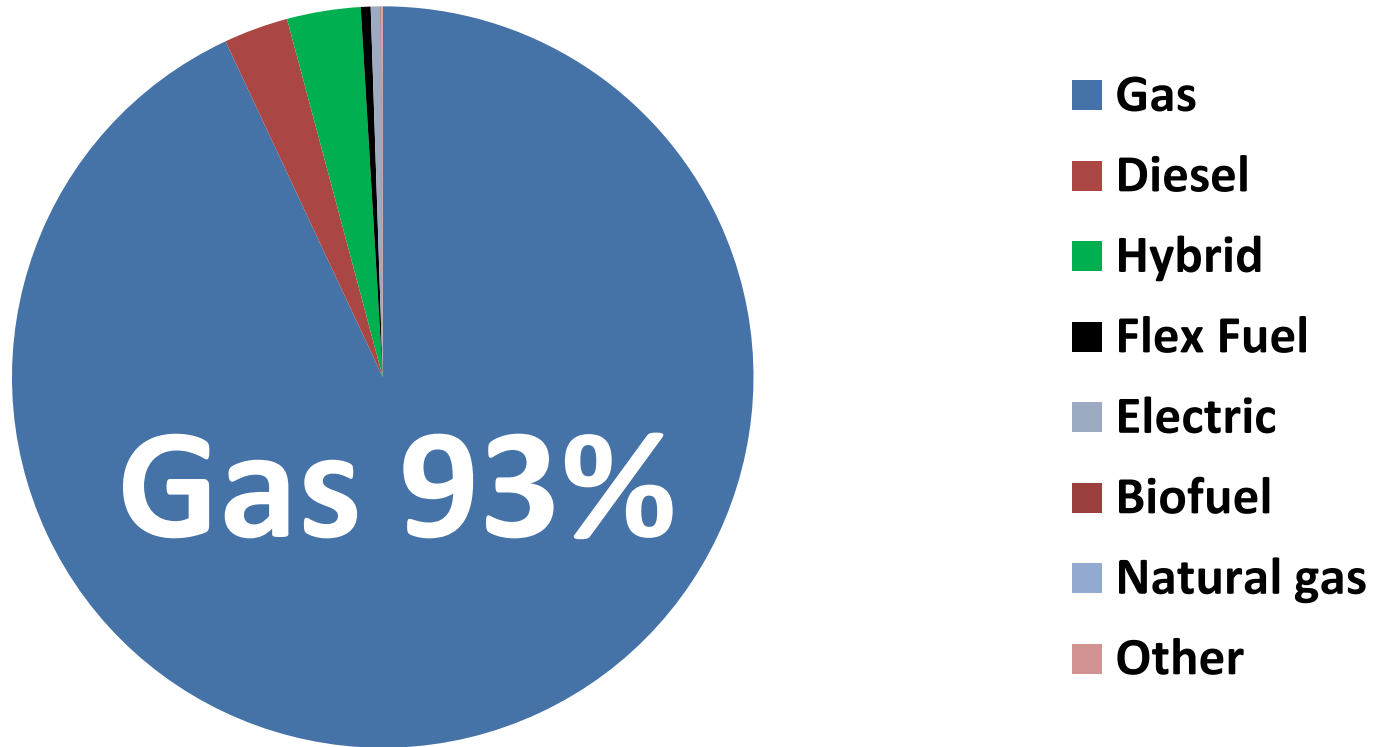
County-to-County Work Patterns



Free parking (by trip purpose)

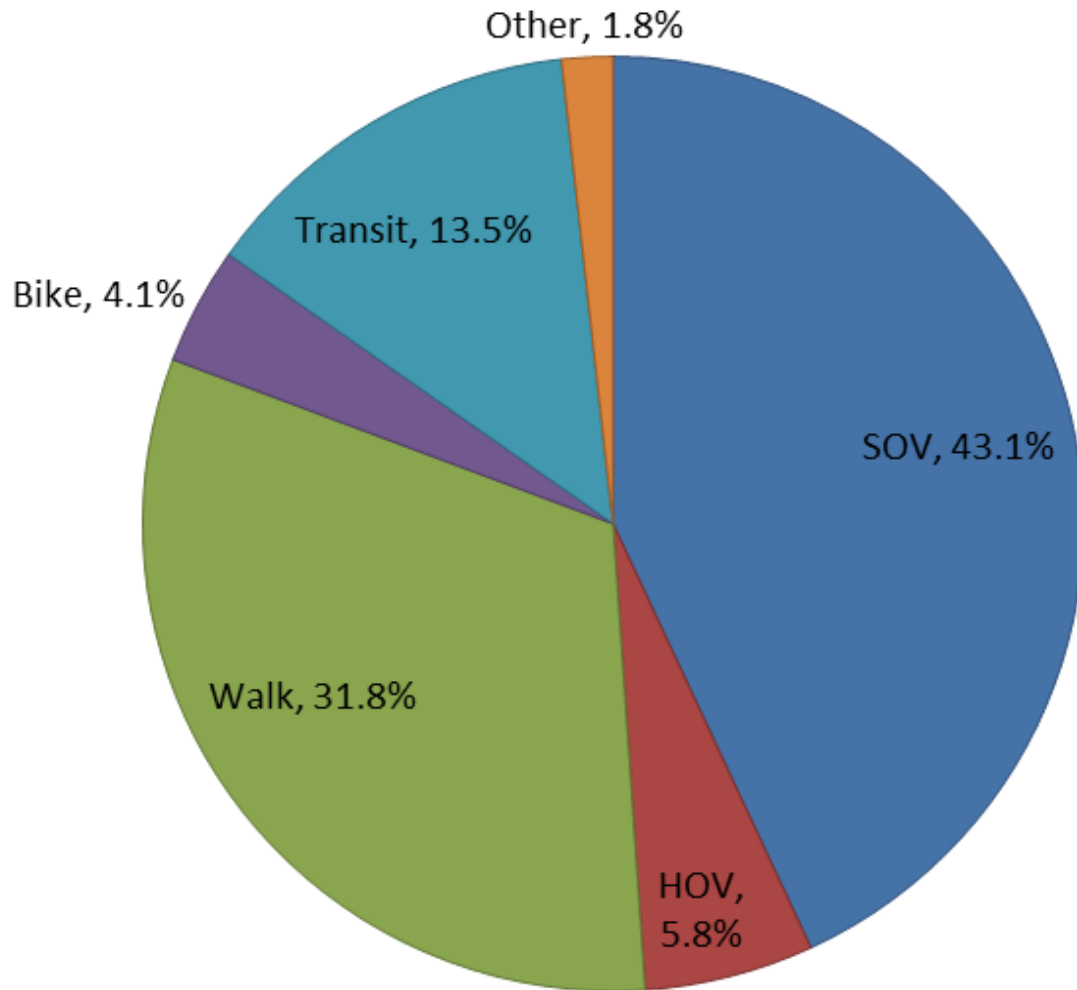


Vehicle Fuel Type



- Highest Hybrid Share: **5%**, on the East Side
- Highest Diesel Share: **4%**, in South Pierce

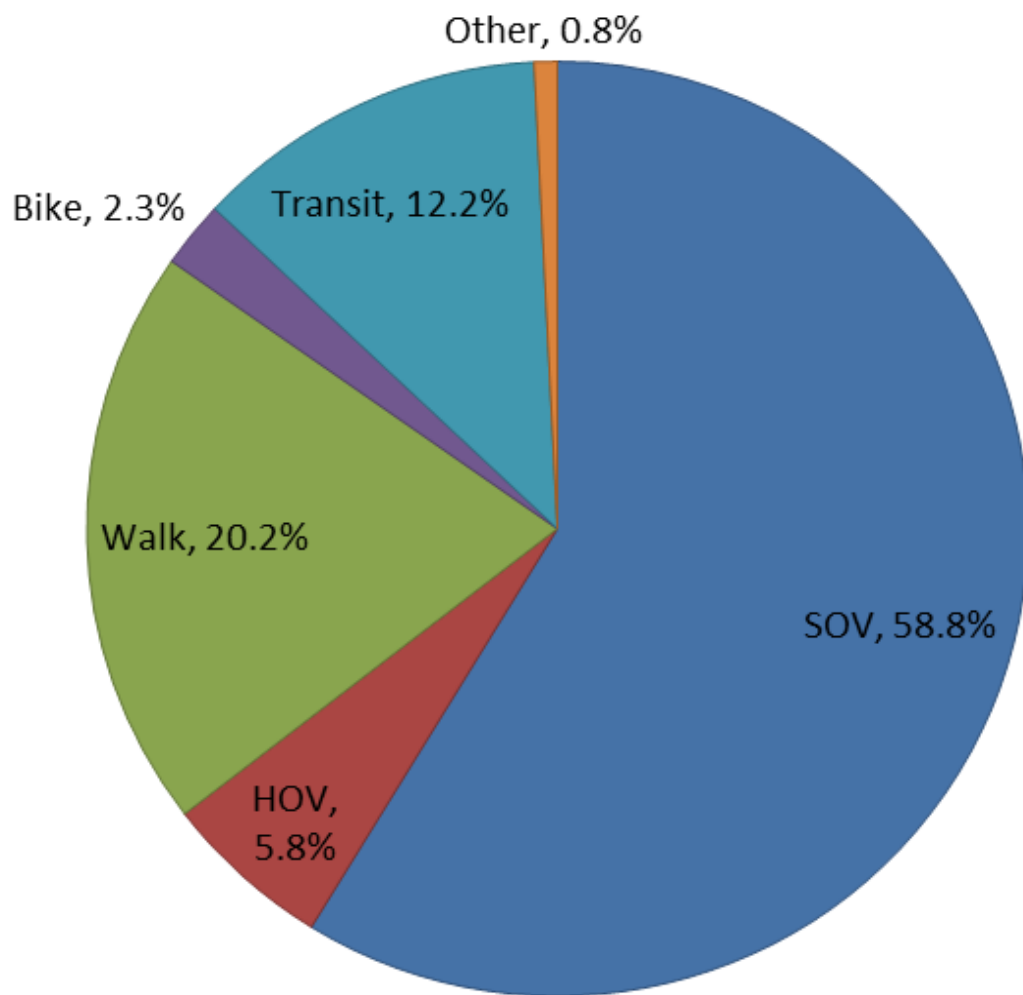
Trip Mode: Single + Millennial*



Drive Alone: 43%
Walk: 32%

**King County + All Trips*

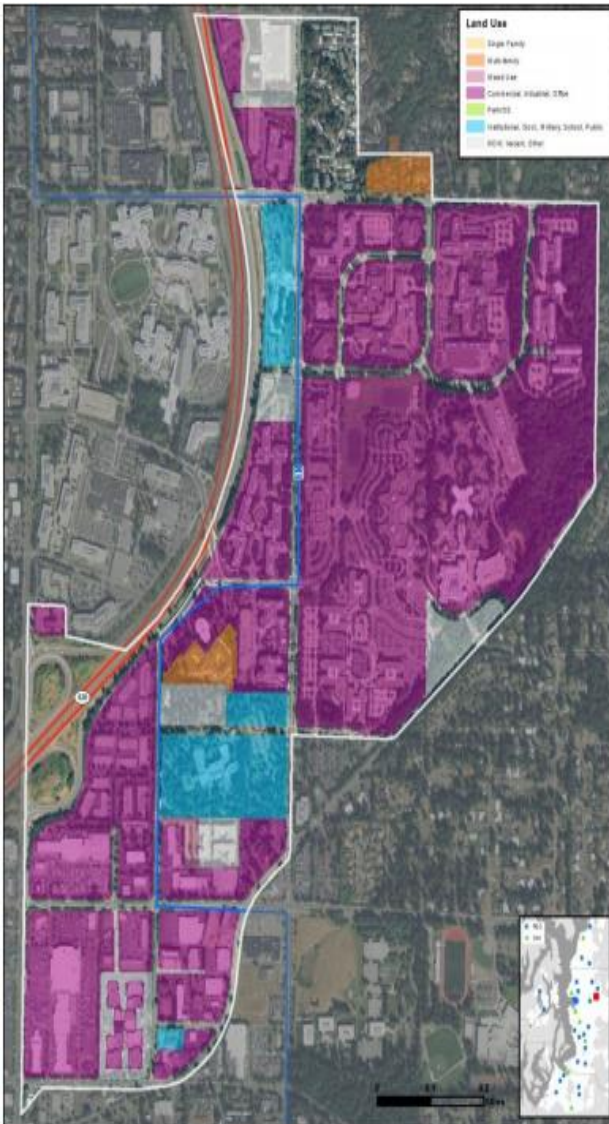
Trip Mode: Single + GenX / Boomers*




Drive Alone: 59%
Walk: 20%

**King County + All Trips*

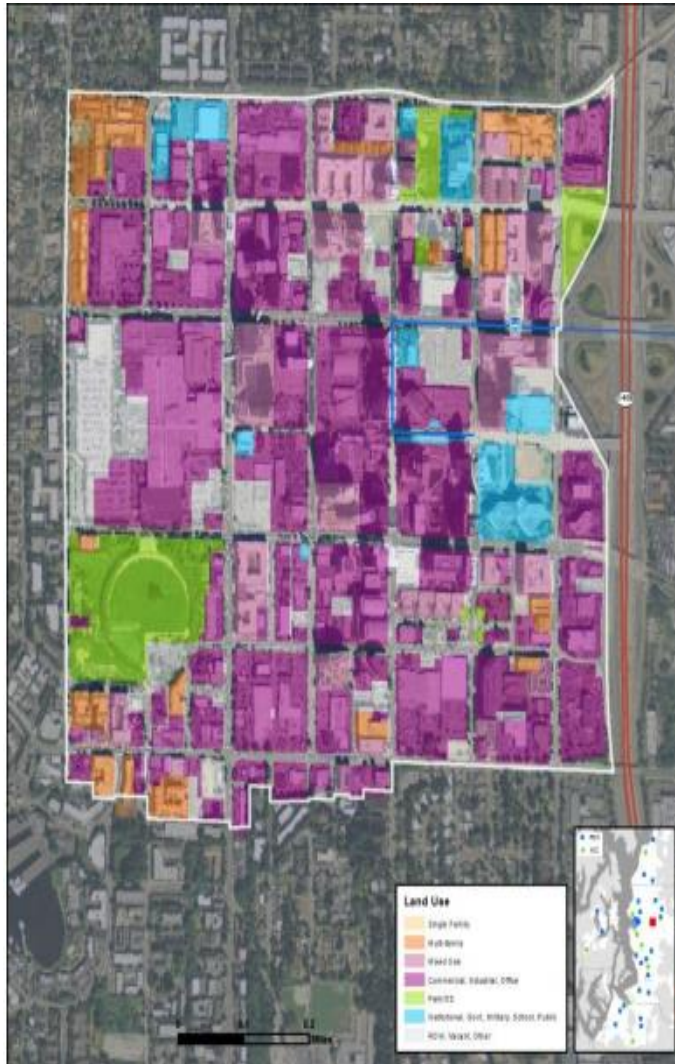
Employment Center Transit Commute Mode Share



Redmond Overlake

 = 19%

Employment Center Transit Commute Mode Share



Downtown Bellevue



25%

Employment Center Transit Commute Mode Share



South Lake Union



25%

Employment Center Transit Commute Mode Share



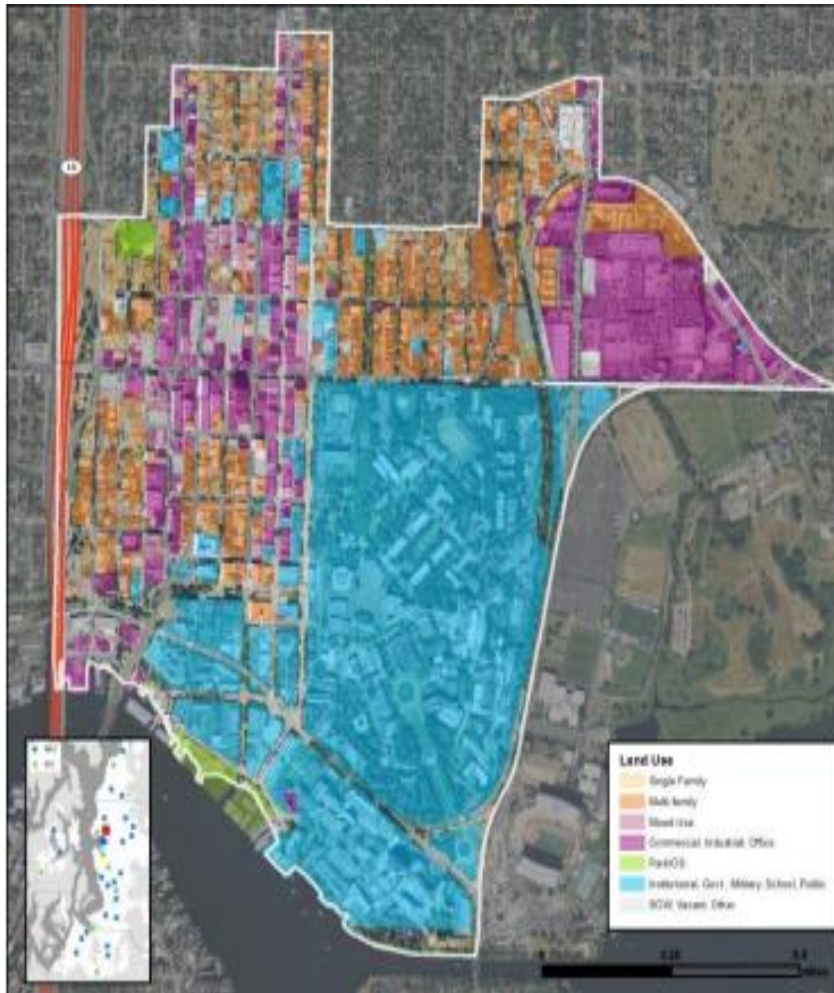
Capitol Hill & First Hill



32%

Employment Center Transit Commute Mode Share

University District

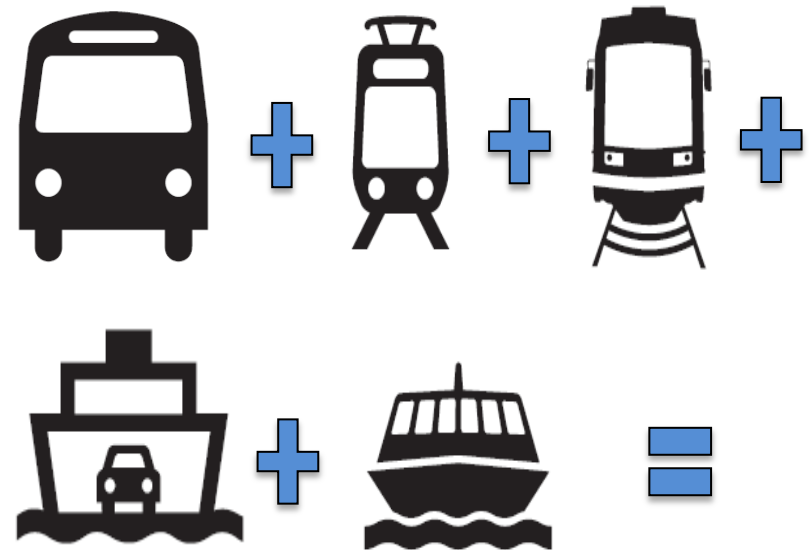


 = 44%

Employment Center Transit Commute Mode Share



Downtown Seattle



54%

2014 Regional Travel Study

- ❖ Background & methodology
- ❖ Data & findings
- ❖ **Coming Up Next**

College/University Survey

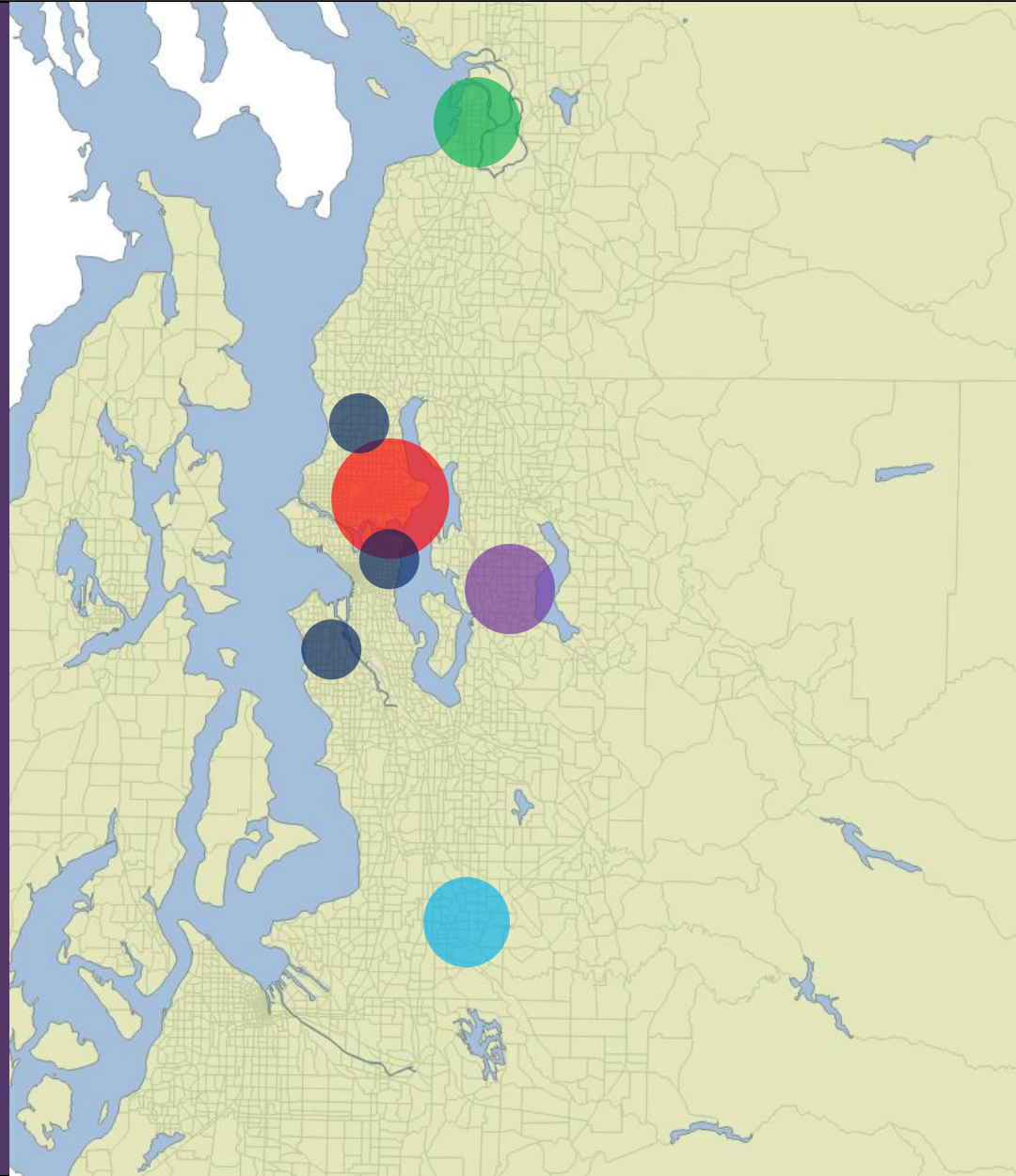
University of Washington
Montlake Campus

Everett Community College

Seattle Colleges
(3 campuses)

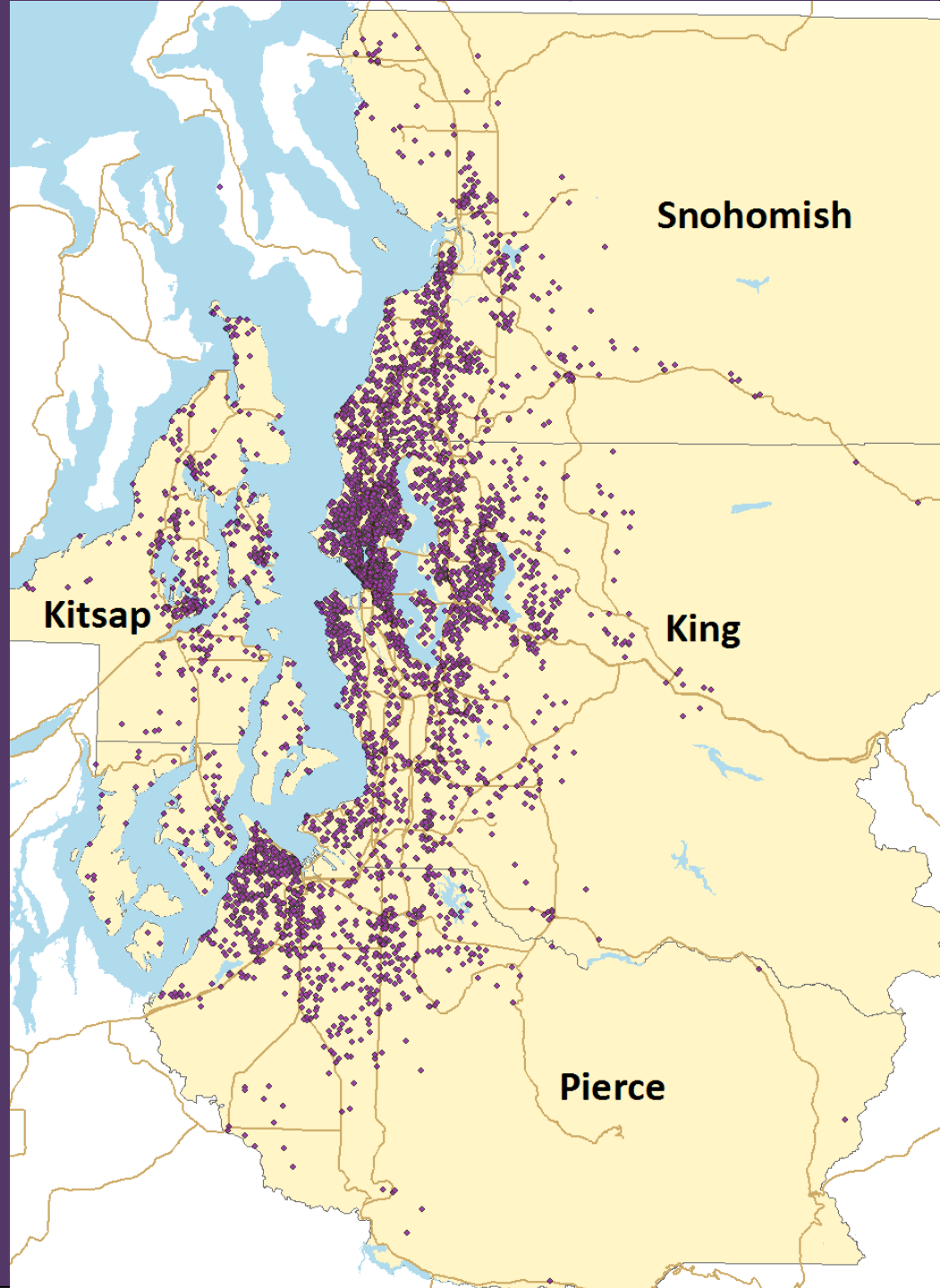
Bellevue College

Green River
Community College



2015 Household Survey!

- Goal of 1,200 households
- 50% “panel survey” – asking the same households the same questions
- 50% new households
- Plus, a pilot study of smartphone-based data collection
- Happening right now



Every 8 years? How about 2?

1961

1971

1988

1999

2006

2014 **2015** **2017**

*More frequent
data collection
is coming.*



Data Availability

- Public Release 2: **available now**

<http://www.psrc.org/data/transportation>

All data, stripped of confidential information

Weighting and linking documents

Survey instruments

- Public Release 3: **this June**

Refined transit access modes

Trips stitched into round-trip “tours” for travel modeling



2014 Regional Travel Study

Thank You!

Billy Charlton
Director of Data, PSRC

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(206) 464-5301